

Ruggedized Minicamera



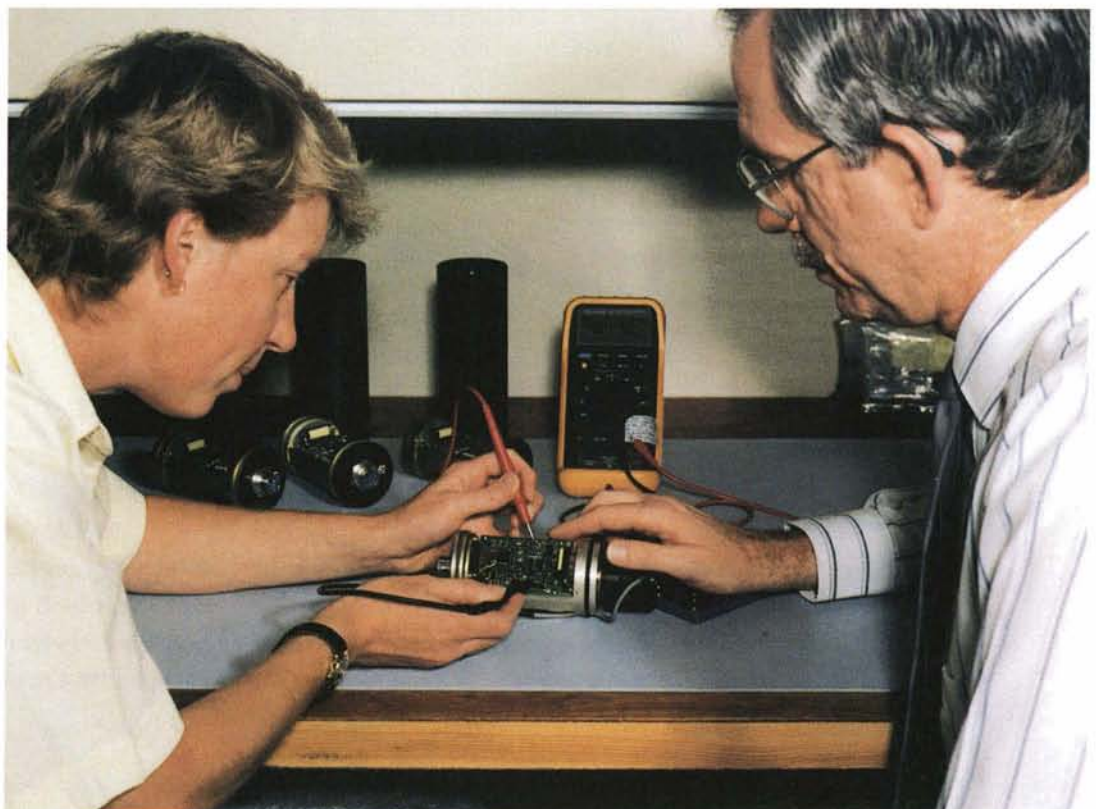
On September 1, 1985, scientists of Woods Hole Oceanographic Institute were able to view once again the ocean liner *RMS Titanic*, which had sunk 13,000 feet below the surface of the North Atlantic 73 years earlier. The camera that was able to penetrate the darkness of the ocean depths and withstand the extremely high pressures of the deepwater environment was a Videospection Model 865 manufactured by Videospection, Inc., Salt Lake City, Utah, a company that specializes in design and production of cameras for unusual and demanding applications.

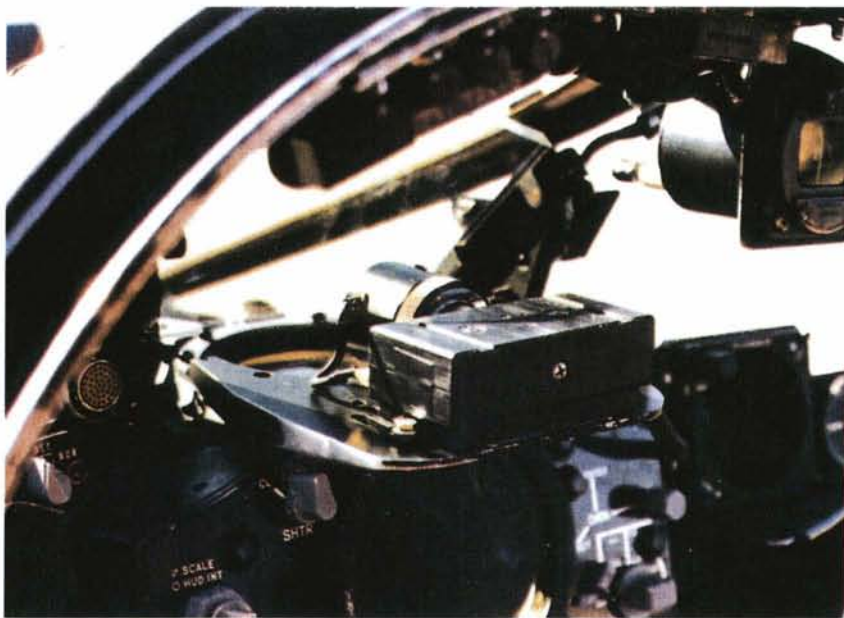
When NASA sought a video camera for use aboard the Space Shuttle, the agency turned to Videospection for development of a minicamera "ruggedized" to NASA specifications. The camera, now used on Shuttleborne research packages, is 7 1/2

inches in diameter with its lens affixed. The camera and lens are enclosed in a lightweight, extra-durable sealed aluminum housing that protects the optics and the Charged Coupled Device (CCD) from the effects of the harsh orbital environment or from conditions encountered in other aerospace environments, such as sounding rockets, military aircraft and robotic systems.

The NASA camera spawned two new models that are now being marketed by Videospection for commercial and aerospace applications where ruggedness, high resolution and high reliability are required. The commercial versions are the Model 885 Intensified CCD Camera and the Model 891 CCD Video Camera.

Below, Videospection chief engineer Donald Stewart (striped shirt) and a technician discuss a production matter





At left is a Videospection Model 2531-A Color Camera in a military fighter installation and below is a Videospection underwater camera used aboard the *Perry* oceanographic research vessel to provide high reliability in high pressure environments; the photo shows a pan and tilt unit with a camera and a light assembly attached, mounted just in front of the diver's viewing portal. •

relative to the Model 891. Designed to accommodate a wide range of temperature fluctuations and severe vibration/shock, the camera system has been temperature-tested from minus 45 degrees to plus 85 degrees Centigrade. The Model 885 features an advanced GEN II image intensifier optically coupled to the Model 891. The latter camera, says chief engineer Stewart, "is finding its way into many applications in the military and consumer markets."

Other members of the Videospection family of cameras are being used for such applications as color TV inspection of the walls of a gas well; monitoring the hook-up between a military air refueling tanker and a "customer" aircraft; internal inspection of nuclear reactors; and digital radiography, for either medical diagnostic or industrial flaw detection applications.

